George's PINK PAGES

May 2001

The GOOD and BAD of Swarms!

If you have LOST a swarm from one of your colonies, you can't say anything GOOD about swarming. If you have just retrieved a swarm that was found hanging in a tree near the county police department, you can't say anything BAD about swarming.

Bees swarmed back in the Garden of Eden as their way of reproduction and making new homes over the vast expanse of the whole world; and they HAVE NO CHANGED THEIR PROGRAM ONE IOTA! The will still be doing the same in the future unless the are made extinct by Americans who have seen too many Hollywoodized "killer bee" movies, and self-declared themselves, their children, and even their pet dog ALLERGIC to bee stings.

If you have carefully followed, not only, my PINK PAGES, but the findings of almost every bee researcher or scientist about the management techniques of swarm prevention, your bees will not swarm very often, but rather always make a fine honey crop. The cardinal points of swarm prevention are: 1) Prevent brood nest congestion by early spring reversing of brood bodies; 2) Have a queen less than 1 year old; and 3) have EXCESS supers of drawn comb in place on the colony just prior to the beginning of the major nectar flow (about April 15th for Montgomery County, MD). Those in doubt of these 3 steps should read pages 618 and 623 of the 1992 Extensively Revised Edition of The Hive and Honey Bee. Since that was written, researchers, scientists, and even commercial honey producers now favor YEARLY requeening instead of requeening every two years. This is not the time or place to debate the value of requeening; but if you allow your bees to requeen themselves, in these times of lack of feral bees and hence few drones around, your bees are probably badly inbred with your own drones which can lead to various undesirable traits like poor honey production, mean and nasty, or just "sickly". This is one of the reasons that those bee breeders that possess great knowledge and integrity swap queens annually with other breeders in order to produce drones away from their own line and hence reduce inbreeding.

Much to my dismay, I have found that most beeHAVERS and some beeKEEPERS are NOT aware of the fact that most swarms are headed by an old queen who probably will be superseded in a few months after swarming or die during the coming winter. In nature, only a few swarms survive and are still alive a year later. Perhaps this is nature's way of preventing inbreeding. Further, although heavily debated, the quality of queens resulting from supersedure of the old queen is highly questioned.

However, there is much GOOD that can be attributed to a new swarm. A captured swarm is placed in a hive consisting only of ten frames of foundation. Since the life expectancy of a bee during flying weather is a mere 6 weeks, this means that more than half of all the swarm bees are going to be dead before the first new worker bee emerges from her 21 day (3 week) gestation period. The queen can't lay eggs on foundation until the bees draw that foundation into comb, and the bees need lots of nectar in great haste to acquire the energy to produce the beeswax scales to build comb. Further, comb has to be build to hold the nectar that is collected. The POINT is: A swarm of bees is DESPERATE and in great hurry to draw foundation and build comb, and works "overtime" to find nectar to accomplish this. Hence, a swarm is extremely valuable to get frames

of foundation drawn into drawn comb that you can use in your other bee colonies; and you can destroy the bees and queen when they finish "their job" of drawing foundation unless you want another colony of bees for yourself.

Another value of a swarm is as a gift to someone who might be interested in beekeeping. That is exactly how Master Beekeeper Ann Harman got started in beekeeping in the late 70's, and today, she is an international consultant in beekeeping. I often use a caught swarm in observation hives rather than deplete my honey production colonies. Of course, the value of transferring frames of brood from a hive of swarm bees to one of your weak colonies is obvious. If you want to experiment, try a new idea, prove some management technique, or even do something "forbidden", do any of these things with a swarm rather than with your own "pedigreed" valuable bees. One might remember the old adage: Don't look a gift horse in the mouth. Acquiring a swarm of bees that did not come from your colonies is a very valuable asset for you that can have lots of different uses, some of which will help your own colonies and others of which might help your learning of better beekeeping. Make an effort to catch every swarm possible as it can serve beekeeping in so many valued ways when in the hands of a beekeeper, whereas its chances of feral survival are next to zero due to the universal presence of mites over the entire U. S.

Unfortunately, the great majority of all beekeepers, both novice and experienced, have accepted swarming as "one of those surprise unfortunate events in beekeeping that is very difficult to prevent"; and they are WRONG! Swarming is NOT a surprise to a beekeeper who is aware of the recent findings of researchers about swarming and uses the bee management techniques recommended by those researchers, thereby PREVENTING most swarms! Yes, there are still some people who practice cutting out swarm cells and clipping of a queen's wings as swarm prevention techniques; and these systems are as obsolete as women's corsets, an Underwood #5 typewriter, or a car with a manual choke. Rather than spending their time "bitching and complaining", they should spend their time LEARNING swarm prevention techniques of our new 21st century.

There are so many things that beekeepers either don't know about swarming, or believe in the many "old wive's tales", or use anthropomorphic thinking to explain why their bees swarmed. The result is that these people lose swarms, fail to produce much honey, and pass on their lack of bee knowledge to other people. The errors of our honey bee thinking of 50 years ago have grossly come to light in the past 20 years due to the increased vigor of research by bee scientists to solve problems caused by appearance of mites, small hive beetles, resistant AFB, Africanized bees, etc. Now, armed with these new findings, much of our older thinking about swarming can be discarded and replaced with new techniques that have been developed due to the new findings. For example, queens do NOT decide to swarm, but it is her daughters, the worker bees, that make the decision to swarm, stop feeding the queen so she can reduce weight in order to fly, prepare swarm cells, force the queen to lay in the cell, prepare drone size cells for drones to mate with a new virgin queen, partially suspend field foraging for nectar, send out scouts looking for possible new home sites, prevent the old queen from destroying the new swarm cells, and a dozen other swarm preparations. These are programs started 2-3 weeks in advance of the swarm issuance, and 2-3 weeks is NOT some sudden action of the bees that many people think is what happens about the act of swarming. Now, we know that clipping a queen's wings will NOT prevent swarming, because the bees will kill their mother and swarm with the first virgin queen that emerges. In bygone days we used to think that swarms were disease free, but now we know that they carry large loads of mites with them to new homes and will probably die shortly because they are no longer treated for mites. This new research has proved that

a queenbee makes almost NO decisions about the affairs of the colony, and about 95% of ALL decisions are made by the worker bees based upon the circumstances found within the colony at specific times. All of this is thoroughly discussed in many recent books as well as my PINK PAGES, but many beekeepers just cannot abandon the beliefs of the "old timers", and accept the findings of recent scientific research. As a former Manhattan Project scientist, no wonder we kept the building of atom bombs so secret, because had we not, the American people surely could not be convinced of atom energy without SEEING IT IN USE and the voters might have failed to re-elect President Roosevelt in 1944. By the way, not even Vice President Harry Truman knew a single thing about the Manhattan Project until a few hours after he was sworn in as the new President after the sudden death of Roosevelt. I was "locked-in" at Oak Ridge National Laboratory developing methods to purify Uranium 235 then, along with 75,000 other workers who were UNKNOWN to Truman, most senators and congressmen, and ALL of the American public. It is "high time" that you avail yourself to the literature and talks about the new advanced findings of bee research over the past 20 years if you are to upgrade your status of beeHAVER to beeKEEPER, not to mention the appreciation of the real JOYS OF BEEKEEPING.

****

I have a new, great big, golden queen now in my apiary. The telephone rang on late Monday afternoon, April 16th from a lady in Alexandria, VA asking me if I could PLEASE "come and remove a swarm of bees clustered on her chain link yard fence before they stung somebody?". No longer can I do this since being disabled by strokes, but my eldest son "volunteered" to take my electric vacuum swarm retriever and drive to Alexandria that night and get them. He brought home a fine 4 pound swarm, and I installed them on 10 sheets of foundation the next day. Upon inspection on Friday, April 27th, I found a big golden queen who has layed some brood on 3 frames and foundation drawn on a total of 7 frames filled with sugar syrup that I have been feeding, and all of this just 10 days after I installed them and we have had freezing weather at night. By the way, since I will not remove any honey from them this year, I have Apistan strips in the hive now.